From: Davis, Eva [Davis.Eva@epa.gov]

6/28/2018 7:53:03 PM Sent:

d'Almeida, Carolyn K. [dAlmeida.Carolyn@epa.gov] To:

RE: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR - Williams site Subject:

According to the information Cathy provided one well has a radius of influence of more than a mile. city is planning on installing 5 wells in the same general area, where it is likely the radius of influence of the wells will overlap, making the drawdowns from the wells additive - meaning that the five wells could have a much greater radius of influence than just one well.

----Original Message----From: d'Almeida, Carolyn K.

Sent: Thursday, June 28, 2018 2:47 PM To: Davis, Eva <Davis.Eva@epa.gov>

Subject: FW: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR -

Williams site ST012

fyi

---Original Message----

From: Huang, Judy

Sent: Thursday, June 28, 2018 12:01 PM

To: MOOK, PHILIP H JR GS-15 USAF AFCEC AFCEC/CIBW <philip.mook@us.af.mil>

Cc: JERRARD, CATHERINE V CIV USAF HAF AFCEC/CIBW <catherine.jerrard@us.af.mil>; TERMAATH, STEPHEN G GS-15 USAF AFCEC AFCEC/CIB <stephen.termaath@us.af.mil>; Herrera, Angeles <Herrera.Angeles@epa.gov>; d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>

Subject: RE: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR -Williams site ST012

Hi Phillip:

Thank you for the email.

I am reviewing the information as we speak.

Also, yes, I know about the BCT today.

I plan to be on the call.

I appreciate the drinking water well information Cathy provided.

Without in depth review of the supporting site data, below are my preliminary thoughts:

I am in agreement that currently, ST012 does not appear to be impacting the City of Mesa's drinking water wells.

However, the distance between leading edge of the fuel plume and the drinking water well may be shrinking.

The distance from STO2 to the closest existing drinking water well located near S. Ellsworth and E. Pecos is about 2.3 miles (Southeast of ST012, according to Google Maps).

According to the email from Cathy, the zone of influence of the drinking water well at maximum pump rate is about 1.23 miles.

In a very SIMPLISTIC point of view, this does not leave us that much distance as a buffer (~1 mile). Without adequate containment and plume control, there is a high probability that the City of Mesa's drinking water well will be impacted.

As to the discussion about a stability of a mature fuel plume, based on recent detection of benzene at CZ23, I suspect we will have a good discussion on the stability and current boundary of the fuel plume.

I look forward to discuss this issue further with you.

Thank you and have a wonderful day.

Judy

----Original Message----

From: MOOK, PHILIP H JR GS-15 USAF AFCEC AFCEC/CIBW [mailto:philip.mook@us.af.mil]

Sent: Thursday, June 28, 2018 10:51 AM To: Huang, Judy <Huang, Judy@epa.gov>

Cc: JERRARD, CATHERINE V CIV USAF HAF AFCEC/CIBW <catherine.jerrard@us.af.mil>; TERMAATH, STEPHEN G GS-15 USAF AFCEC AFCEC/CIB <stephen.termaath@us.af.mil>

Subject: RE: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR -Williams site ST012

Importance: High

Judy,

I was out of the office for a medical procedure, which delayed my response.

Hopefully, Carolyn has already pass along to you that the meeting you requested on ST012 was already scheduled for today at 1:00pm pacific. The attached agenda includes the call-in information. The file titled, June 2018 BCT ST012 presentation, covers the topics you've requested.

I've also included an email from Cathy Jerrard regarding the lack for potential for the ST012 plume to impact current or planned City production wells. Given the location the ST012 plume vs. current and future City wells, ST012 impacting city water quality is not credible. We can talk further on the inherent stability of a mature fuel plume and the distance from ST012 to the City's production wells (4 miles and greater).

I'm in a meeting right now, and give you a call as soon as it's over, approx. 1130 pacific.

Thanks,

//SIGNED//
Philip H. Mook, Jr., P.E.
Western Program Execution Branch
Air Force Civil Engineer Center
Office: 916-643-1250 ext 100
Cell: 916-203-2539

----Original Message---From: Huang, Judy [mailto:Huang.Judy@epa.gov]
Sent: Tuesday, June 26, 2018 9:55 AM
To: MOOK PHILLE H. 18, 65-15 USAE AECEC AECEC/CIRW only

To: MOOK, PHILIP H JR GS-15 USAF AFCEC AFCEC/CIBW <philip.mook@us.af.mil>

Cc: Herrera, Angeles <Herrera.Angeles@epa.gov>; d'Almeida, Carolyn K. <dAlmeida.Carolyn@epa.gov>
Subject: [Non-DoD Source] FW: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR - Williams site ST012

Hi Philip:

I want to follow up on the Williams AFB ST012 issue. As you know from the email exchange attached below between my Division Director and Mr. Termaath, we have some concerns regarding plume control/containment during the EBR pilot study and the potential that the EBR could cause offsite contaminant migration and impact the City of Mesa's drinking water supply.

In light of the detection of Benzene in one of the current sentry wells (CZ23), we believe plume containment should be established before proceeding with the EBR pilot study. We strongly believe that the pilot study should not exacerbate existing groundwater contamination and that it is to both agencies' interest not to impact Mesa's drinking water.

I would like to set up a Skype meeting (with data, maps, etc.) and to see what we can do to resolve this. Please let me know when you and your team will be available before the start of the EBR injections.

Thank you!

Judy

Judy C. Huang, P.E.
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75 Hawthorne Street (SFD-8-3)
San Francisco, CA 94105
Phone: 415-972-3681
FAX: 415-947-3520

----Original Message----From: Manzanilla, Enrique

Sent: Wednesday, June 20, 2018 4:50 PM

To: TERMAATH, STEPHEN G GS-15 USAF AFCEC AFCEC/CIB <stephen.termaath@us.af.mil>; 'Laura L. Malone'

<Malone.Laura@azdeq.gov>

Cc: Herrera, Angeles Herrera.Angeles@epa.gov; Maldonado, Lewis Maldonado, Lewis Herrera.Angeles@epa.gov; Maldonado, Mald

Subject: RE: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR -Williams site ST012

Hello Stephen:

I apologize for the time lag in my reply. I've been very busy getting a new Regional Administrator up to speed on a plethora of issues.

I've had some preliminary discussions with my staff. They are mainly concerned that the pilot study as proposed will increase the mobility of the contaminant. Adequate monitoring and plume control need to be included to ensure successful implementation of the EBR, prevent offsite migration of contaminants, and avoid potential impacts to the City of Mesa's new drinking water wells.

I will review these issues with my staff in more depth and coordinate with our colleagues at ADEQ. I hope to get back to you before the end of the month.

Enrique Manzanilla Director, Superfund Division US EPA Region IX

----Original Message----

From: TERMAATH, STEPHEN G GS-15 USAF AFCEC AFCEC/CIB [mailto:stephen.termaath@us.af.mil] Sent: Tuesday, June 12, 2018 9:50 PM

To: Manzanilla, Enrique <Manzanilla.Enrique@epa.gov>; 'Laura L. Malone' <Malone.Laura@azdeq.gov> Subject: Urgent - EPA comments to Pilot Study Implementation Work Plan halt going forward with EBR -Williams site ST012

I understand Region 9 has commented on the updated work plan for the Williams pilot study for enhanced bioremediation remediation. The EPA review of the Pilot Study Implementation Work Plan concluded: "Although AF has declared this to be a final document, we find the Pilot Study WP insufficiently detailed to implement in its current form.'

The Air Force submitted a revised work plan as promised in the dispute resolution agreement to change the EBR to a pilot study and address EPA and ADEQ comments on the last version of the work plan. This was supposed to be the final work plan so that EBR could commence quickly. The Air Force submitted the revised work plan per agreement in the dispute resolution.

Unfortunately, EPA responded to the work plan with approximately 100 new comments on what was supposed to be final the work plan. I will not go into detail on the comments, but these demand duplicating sampling that has been accomplished over the last two years before EBR can be started, want detailed plans for contingency treatment before EBR can be started and rehash general concerns about whether EBR will be successful. Overall, the comments create considerable delay in starting EBR and at a minimum go against the spirit or the dispute resolution agreement. The addition of approximately 100 new comments on the work plan are unwarranted. Some of the specific comments clearly conflict with the dispute resolution.

The Air Force considers the Pilot Study Implementation Work Plan final since it complies with dispute resolution agreement.

I ask for your immediate support in moving forward.

Stephen TerMaath, P.E., GS-15, DAF Chief, BRAC Program Management Division Installations Directorate

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